

## 1.0 INTRODUCTION

This technical report is one of several documents that, taken together, support the NOAA Fisheries (formerly National Marine Fisheries Service, or NMFS) proposed Status Review of West Coast Evolutionarily Significant Units (ESUs) of Pacific salmon and steelhead and implements the proposed Hatchery Listing Policy. This report details the information and analyses presented at NOAA Fisheries' Artificial Propagation Evaluation Workshop held in April 2004 and incorporates comments and input received.

Readers interested in a complete presentation of the current issues, proposals, and decisions associated with NOAA Fisheries' hatchery policies and proposed listings should refer to all of the following, in addition to this report:

- NOAA Fisheries Proposed Hatchery Listing Policy
- NOAA Fisheries Status Review Determinations
- Artificial Propagation Evaluation Workshop Report, April 21-23, 2004
- Salmon and Steelhead Hatchery Assessment Group (SSHAG), "Hatchery Broodstock Summaries and Assessments for Chum, Coho, and Chinook"
- Salmon and Steelhead stocks Within Evolutionarily Significant Units Listed
- Under the Endangered Species Act
- NMFS Pacific Salmonid Biological Review Team (BRT) Final Report

In considering species for listing under the Endangered Species Act (ESA), Section 3 of the ESA requires NOAA Fisheries to take the following steps:

- (1) Determine whether a population or group of populations constitutes an ESU, i.e., whether the populations should be considered a "species" within the meaning of the ESA. .
- (2) Assess the biological status of the entire ESU, natural-origin fish and hatchery-origin fish included, and the factors that have led to its decline.
- (3) Assess efforts being made to protect the ESU, determining if these efforts are adequate to mitigate threats to the species.
- (4) Based on the foregoing information and the statutory listing criteria, NOAA Fisheries then proposes a listing determination of whether the species is threatened or endangered in a significant portion of its range.

This report addresses the delineation of Pacific salmon and steelhead ESUs (step 1, above) and determination of the biological status of each ESU, inclusive of both hatchery and natural components (step 2). This report also documents NOAA Fisheries technical staff assessments presented to the April 2004 Artificial Propagation Evaluation Workshop.

The Background Section offers a brief summary of the context for this report. To avoid duplication of material presented elsewhere, however, this section is abbreviated, and readers are referred to the other documents cited above.

The Definitions Section defines the key terms used in this report. The Methods Section provides an overview of the processes, policies, and analysis used to delineate each ESU and then to evaluate the biological status of each ESU. The Results and Conclusions Section delineates each ESU (natural-origin and hatchery-origin fish included) and assesses biological status at the population and ESU scales.